

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-14. (Canceled)

15. (Currently Amended) A computer-usable program embodied on an information storage medium, in which information for controlling an image generation system which generates ~~an~~ a three-dimensional image of an object formed by a primitive surface is stored, the program comprising information necessary for implementing:

hit check processing means for determining whether an object has been hit in sequence ~~by a player using a controller;~~

impact computation means which computes an impact position at which an impact is imparted to the object hit in sequence in real-time;

distortion computation means which performs computations for each impact to the object for causing distortion of the primitive surface in a vicinity of the impact position at which ~~the each~~ impact is imparted to the object in sequence in real-time; and

image generation means which generates an image of the object formed by the primitive surface that has been distorted after the each impact was imparted to the object,

wherein the distortion computation means comprises:

means which computes at least one distortion point for specifying a three-dimensional shape of the primitive surface that is distorted by the impact, the at least one distortion point corresponding to the impact point; and

point-to-be-moved determination means which determines at least one of surface-specifying points determined by a distance from the impact point to be moved to the computed distortion point, ~~after the object has been subjected to an initial impact, but no subsequent impacts,~~ the surface-specifying points being distributed over the surface of the

object or in a vicinity of the object for defining the primitive surface that forms the object.

16. (Previously Presented) The program as defined in claim 15, wherein the distortion computation means further comprises:

means which causes the position of the thus-determined at least one surface-specifying point to move to the at least one distortion point;

wherein the image generation means comprises information necessary for specifying the primitive surface based on the surface-specifying point that has been moved and for generating an image.

17. (Previously Presented) The program as defined in claim 16,

wherein the impact computation means further comprises means which calculates the magnitude and direction of the impact imparted to the object; and

wherein the program comprises information necessary for calculating the at least one distortion point from at least one of the impact position and the magnitude and direction of the impact.

18. (Previously Presented) The program as defined in claim 16,

the program further comprising information necessary for distributing the surface-specifying points in a predetermined density.

19. (Previously Presented) The program as defined in claim 16, further comprising information necessary for distributing the surface-specifying points in an arrangement that deviates in a random manner from grid points.

20. (Currently Amended) A computer-usable program embodied on an information storage medium, in which information for controlling an image generation system which generates ~~an~~ a three-dimensional image of an object formed by a primitive surface is stored, the program further comprising information necessary for implementing:

hit check processing means for determining whether an object has been hit in

~~sequence by a player using a controller;~~

impact computation means which computes an impact position at which an impact is imparted to the object hit in sequence in real-time;

distortion computation means which performs computations for each impact to the object for causing distortion of the primitive surface in a vicinity of the impact position at which the each impact is imparted to the object in sequence in real-time;

image generation means which generates an image of the object formed by the primitive surface that has been distorted after the each impact was imparted to the object; and

adjusting means which adjusts the density of distribution of the surface-specifying points in accordance with a magnitude of distortion of the object due to an impact,

wherein the distortion computation means comprises:

means which computes at least one distortion point for specifying a three-dimensional shape of the primitive surface that is distorted by the impact, the at least one distortion point corresponding to the impact point; and

point-to-be-moved determination means which determines at least one of surface-specifying points determined by a distance from the impact point to be moved to the computed distortion point, ~~after the object has been subjected to an initial impact, but no subsequent impacts,~~ the surface-specifying points that are distributed over the surface of the object or in a vicinity of the object for defining the primitive surface that forms the object, and

the magnitude of distortion due to the impact is determined by at least one of a material of the object subjected to the impact and a type of the impact.

21. (Previously Presented) The program as defined in claim 16, further comprising information necessary for ensuring that the point-to-be-moved determination means determines a surface-specifying point in the vicinity of the impact position as a point

to be moved.

22. (Previously Presented) The program as defined in claim 16, further comprising information necessary for distributing the surface-specifying points in real-time after the object has been subjected to an impact.

23. (Previously Presented) The program as defined in claim 22, further comprising information necessary for determining at least one of the range and density of distribution of the surface-specifying points in accordance with an impact that has been imparted to the object.

24. (Previously Presented) The program as defined in claim 16, further comprising information necessary for:

implementing texture mapping computation means which performs computations necessary for mapping a texture onto the primitive surface that has been distorted by an impact; and

causing the texture mapping computation means to perform texture mapping processing, using texture coordinates that corresponded to the surface-specifying point before movement, even when the surface-specifying point has been moved by an impact.

25. (Previously Presented) The program as defined in claim 16, further comprising information necessary for:

implementing texture mapping computation means which performs computations necessary for mapping a texture onto the primitive surface that has been distorted by an impact; and

causing the texture mapping computation means to perform texture mapping processing, using texture coordinates which correspond to the impact position and are related to the surface-specifying point that has been moved by an impact.

26. (Previously Presented) The program as defined in claim 16, further

comprising information necessary for performing image generation for an object formed by polygonal surfaces having the surface-specifying points as vertices.

27. (Previously Presented) The program as defined in claim 16, further comprising information necessary for implementing means which performs image generation by using a polygonal object having the surface-specifying points as vertices, and performs shading processing in such a manner that the vicinity of the vertices after a movement is darker, when the vertices have been moved by an impact.

28. (Currently Amended) A computer-usable program embodied on an information storage medium, in which is stored information for controlling an image generation system which generates ~~an~~ a three-dimensional image of an object formed by a polygonal surface; the program comprising information necessary for implementing:

hit check processing means for determining whether an object has been hit in sequence ~~by a player using a controller;~~

object information storage means which stores information on the object formed by the polygonal surface having vertices that are a plurality of points distributed, ~~after the object has been subjected to an initial impact, but no subsequent impacts,~~ over the surface of the object at a predetermined density;

point-to-be-moved determination means that operates when ~~an~~ each impact is imparted to the object, for determining at least one vertex determined by a distance from an impact position to be moved to at least one distortion point for specifying a three-dimensional shape of the vertices, the at least one distortion point corresponding to the imparted impact position at which an impact is imparted to the object hit in sequence in real-time;

means which causes the vertex to move to the at least one distortion point, based on the magnitude and direction of the impact imparted to the object; and

image generation means which generates an image of the object after a distortion

caused by the impact, using the vertex that has been moved.

29. (Currently Amended) A game method which generates ~~an~~ a three-dimensional image of an object formed by a primitive surface, the game method comprising:

performing hit check processing to determine whether an object has been hit in sequence ~~by a player using a controller;~~

computing an impact position at which an impact is imparted to the object hit in sequence in real-time;

performing computations for each impact to the object for causing distortion of the primitive surface in a vicinity of the impact position at which ~~the~~ each impact is imparted to the object in sequence in real-time; and

generating an image of the object formed by the primitive surface that has been distorted after ~~the~~ each impact was imparted to the object,

wherein the performing computations step comprises determining at least one distortion point for specifying a three-dimensional shape of the primitive surface that is distorted by the impact, the at least one distortion point corresponding to the impact point, and determining at least one of surface-specifying points determined by a distance from the impact point to be moved to the at least one distortion point, ~~after the object has been subjected to an initial impact, but no subsequent impacts,~~ the surface-specifying points being distributed over the surface of the object or in a vicinity of the object for defining the primitive surface that formed the object.

30. (Previously Presented) The game method as defined in claim 29, wherein the performing computations step further comprises:

computing the at least one distortion point for specifying the shape of the primitive surface that is distorted by the impact; and

causing a position of the determined surface-specifying point to move to the distortion

point; and

wherein the generating step further comprises specifying the primitive surface based on the surface-specifying point that has been moved and generating an image.

31. (Previously Presented) The game method as defined in claim 30,

wherein the computing an impact position step further comprises calculating the magnitude and direction of the impact imparted to the object; and

wherein the computing at least one distortion point step comprises calculating the at least one distortion point from at least one of the impact position and a magnitude and a direction of the impact.

32. (Previously Presented) The game method as defined in claim 30,

wherein the surface-specifying points are distributed in a predetermined density.

33. (Previously Presented) The game method as defined in claim 30,

wherein the surface-specifying points are distributed in an arrangement that deviates in a random manner from grid points.

34. (Currently Amended) A game method which generates an a three-dimensional image of an object formed by a primitive surface, the game method comprising:

performing hit check processing to determine whether an object has been hit in sequence ~~by a player using a controller~~;

computing an impact position at which an impact is imparted to the object hit in sequence in real-time;

performing computations for each impact to the object for causing distortion of the primitive surface in a vicinity of the impact position at which ~~the each~~ impact is imparted to the object in sequence in real-time; and

generating an image of the object formed by the primitive surface that has been distorted by ~~the each~~ impact imparted to the object,

wherein the performing computations step comprises determining at least one distortion point for specifying a three-dimensional shape of the primitive surface that is distorted by the impact, the at least one distortion point corresponding to the impact point, and determining at least one of surface-specifying points determined by a distance from the impact point to be moved to the at least one distortion point, ~~after the object has been subjected to an initial impact, but no subsequent impacts,~~ the surface-specifying points being distributed, over the surface of the object or in a vicinity of the object for defining the primitive surface forming the object,

a density of distribution of the surface-specifying points is adjusted in accordance with a magnitude of distortion of the object due to an impact, and

the magnitude of distortion of the object due to the impact is determined by at least one of a material of the object subjected to the impact and a type of the impact.

35. (Previously Presented) The game method as defined in claim 30, wherein the point-to-be-moved determination means determines a surface-specifying point in the vicinity of the impact position as a point to be moved.

36. (Previously Presented) The game method as defined in claim 30, wherein the surface-specifying points are distributed in real-time after the object has been subjected to an impact.

37. (Previously Presented) The game method as defined in claim 36, wherein at least one of the range and density of distribution of the surface-specifying points is determined in accordance with an impact that has been imparted to the object.

38. (Previously Presented) The game method as defined in claim 30, further comprising performing computations necessary for mapping a texture onto the primitive surface that has been distorted by an impact, including performing texture mapping processing, using texture coordinates that corresponded to the surface-specifying point before

movement, even when the surface-specifying point has been moved by an impact.

39. (Previously Presented) The game method as defined in claim 30, further comprising performing computations necessary for mapping a texture onto the primitive surface that has been distorted by an impact, including performing texture mapping processing, using texture coordinates which correspond to the impact position and are related to the surface-specifying point that has been moved by an impact.

40. (Previously Presented) The game method as defined by claim 30, wherein image generation is performed for an object formed by polygonal surfaces having the surface-specifying points as vertices.

41. (Previously Presented) The game method as defined in claim 30, further comprising:

performing image generation by using a polygonal object having the surface-specifying points as vertices, and performing shading processing in such a manner that the vicinity of the vertices after movement is darker, when the vertices have been moved by an impact.

42. (Currently Amended) A game method which generates an a three-dimensional image of an object formed by a polygonal surface, the method comprising:

storing information on the object formed by the polygonal surface having vertices that are a plurality of points distributed, ~~after the object has been subjected to an initial impact, but no subsequent impacts,~~ over the surface of the object at a predetermined density;

performing hit check processing to determine whether the object has been hit in sequence ~~by a player using a controller;~~

determining at least one vertex determined by a distance from an impact position to be moved to at least one distortion point for specifying a three-dimensional shape of the vertices, the at least one distortion point corresponding to the imparted impact position at which an

impact is imparted to the object hit in sequence in real-time;

moving the vertex to the at least one distortion point, based on the magnitude and direction of the impact imparted to the object; and

generating an image of the object after a distortion caused by the impact, using the vertex that has been moved.